

WHAT IS CLAIMED IS:

1. A method employed in discriminating an action performed by a human from automatic computerized action, the method comprising:

5 presenting a human ability challenge having a response component;
 receiving a response to the human ability challenge; and
 comparing the received response to the response component to thereby help determine whether the received response was provided by a human.

2. The method of claim 1, comprising generating the human ability challenge.

10 3. The method of claim 2, wherein the step of generating the human ability challenge comprises generating the response component and generating the human ability challenge using the response component.

4. The method of claim 3, wherein the step of generating the response component comprises randomly generating the response component.

15 5. The method of claim 3, wherein the step of generating the human ability challenge comprises creating a distorted visual representation of the response component.

6. The method of claim 3, wherein the step of generating the human ability challenge comprises creating a distorted audio representation of the response component.

20 7. The method of claim 1, comprising selecting a type of human ability challenge from a plurality of human ability challenge types.

8. The method of claim 7, wherein the step of selecting the type of human ability challenge comprises randomly selecting the type of human ability challenge.

9. The method of claim 7, comprising determining the respondent's identity, and wherein the step of selecting the type of human ability challenge comprises selecting the type of human ability challenge based on the respondent's identity.

10. The method of claim 7, comprising generating the response component based upon the type of human ability challenge selected.

11. The method of claim 1, further comprising selecting the human ability challenge from a plurality of stored human ability challenges.

12. The method of claim 11, wherein the step of selecting comprises randomly selecting the human ability challenge.

13. The method of claim 1, comprising providing a request for authentication for gaining access to a computerized resource, receiving an authentication code, and verifying the code responsive to the request for authentication if the received response to the human ability challenge matches the response component.

14. The method of claim 1, comprising receiving a request for access to a computerized resource and providing access to the resource only if the received response to the human ability challenge matches the response component.

15. The method of claim 1, comprising requesting user confirmation of an action and accepting user confirmation only if the received response to the human ability challenge matches the response component.

16. The method of claim 1, wherein the step of presenting a human ability challenge comprises presenting one or more graphical images representing the response component.

17. The method of claim 1, wherein the step of presenting a human ability challenge comprises presenting a plurality of graphical images representing identifiable objects and presenting a cognitive question regarding the plurality of graphical images, wherein the response component represents an answer to the question.

5 18. The method of claim 1, wherein the step of presenting a human ability challenge comprises presenting an audio file reciting a question, wherein the response component represents an answer to the question.

19. The method of claim 1, wherein the step of presenting a human ability challenge comprises presenting a noisy textual image displaying the response component.

10 20. The method of claim 1, wherein the step of presenting a human ability challenge comprises presenting a natural language question, wherein the response component represents an answer to the natural language question.

21. The method of claim 1, wherein the step of presenting the human ability challenge comprises transmitting the human ability challenge from a server to a client.

15 22. The method of claim 21, comprising encrypting the response component and transmitting the human ability challenge with the encrypted response component.

23. The method of claim 22, wherein the step of comparing comprises decrypting the encrypted response component and comparing the decrypted response component to the received response.

20 24. The method of claim 21, wherein the step of receiving a response to the human ability challenge comprises transmitting the response from the client to the server.

25. The method of claim 21, comprising hashing the response component and transmitting the human ability challenge with the hashed response component.

26. The method of claim 25, wherein the step of comparing comprises hashing the received response and comparing the hashed received response to the hashed response component.

27. A system employed in discriminating an action performed by a human from automatic computerized action, the system comprising:

a first program element / first means for presenting a human ability challenge having a response component;

a second program element for receiving a response to the human ability challenge;

and

a third program element for comparing the received response to the response component to thereby help determine whether the received response was provided by a human.

28. The system of claim 27, wherein the first program element resides on a server and the second program element resides on a client connectable to the server.

29. The system of claim 28, wherein the server comprises a proxy server positioned between an application server and the client.

30. The system of claim 28, wherein the server comprises an application server.

31. The system of claim 27, wherein the first, second and third program elements reside on a single computer.

32. In an on-line system, a method for reducing automated access, the method comprising:

allowing on-line access to data;

presenting a human ability challenge using an output device in response to a request for access to data;

receiving an answer to the human ability challenge; and
verifying that the answer satisfies the human ability challenge before allowing
access to data.